

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)	
)	
Amendment of Parts 2 and 95 of the)	ET Docket No. 09-36
Commission's Rules to Provide Additional)	
Spectrum for Medical Device)	
Radiocommunication Service in the)	
413–457 MHz Band)	

To: The Commission

***Ex Parte* Comments of EIBASS to the August 15, 2011, AMF *Ex Parte* Filing**

Engineers for the Integrity of Broadcast Auxiliary Services Spectrum (EIBASS) hereby respectfully submits its *ex parte* comments in the above-captioned notice of proposed rulemaking relating to medical micro-power network service (MMNS) devices at 413–457 MHz. These comments are in response to the August 15, 2011, Alfred Mann Foundation (AMF) *ex parte* filing.

I. AMF Filing Shows That Defects Alleged by EIBASS Were Correct

1. The August 15 AMF *ex parte* letter claims to rebut the defects pointed out in the July 15, 2011, EIBASS *ex parte* filing, but in fact is now a written admission of several of those defects.
2. First, Remote Pickup (RPU) broadcasts using portable base stations and a portable transmitting antenna are not comparable to “land mobile radio (data and voice), ground radar, airborne radar, enhanced position locating system, and amateur television signals.”¹ None of those applications have the likely potential for long duty cycle transmissions at a health care facility like an RPU remote broadcast would. EIBASS has pointed out this difference on multiple occasions, and each time AMF counters with its unsupported claims about what the Aerospace Corporation report allegedly proved. The Aerospace report overlooked these distinct differences of RPU remote broadcasts, and no amount of protestations by AMF is going to change that fact.
3. Second, AMF has now admitted that the receivers in implanted devices will incorporate none of the interference mitigation methods as provided by the master control unit (MCU).

¹ August 15, 2011, AMF letter, at page 1, second paragraph.

ET Docket 09-36: MMNS Devices at 413–457 MHz
EIBASS Rebuttal to AMF August 15, 2011, *Ex Parte* Filing

AMF argues that implanted receivers won't need interference mitigation, because if the MCU detects an interfering signal between 451–457 MHz, it will simply switch to one of the three channels in the federal government spectrum below 450 MHz.² But this ignores the basis for which AMF requested 451-457 MHz, a band regulated by the FCC rather than by the Interdepartment Radio Advisory Committee (IRAC), the former which has jurisdiction over federal government radio bands. All three of the 6-MHz wide channels requested by AMF in the below-450 MHz federal spectrum might simultaneously be in use, so AMF needed a fourth 6-MHz band, outside of the federal government band, for overflow.³ Now AMF argues that if there is interference at 451-457 MHz (and EIBASS submits that such occurrence is “when,” not “if”), the MCU will simply switch to one of the federal government bands.⁴ AMF cannot have it both ways. The AMF house of spectrum cards has just collapsed.

4. Third, the AMF filing reveals that EIBASS got it precisely correct on the “fail gracefully” issue: Namely, that AMF's definition of “fail gracefully” means only that bogus commands would not be sent to implanted muscle stimulators.⁵ Instead, the control of the stimulators would simply stop, unless one of the three federal government band 6-MHz wide channels turned out to be available. But, as noted in the prior paragraph, AMF is already on record as conceding that all three of those 6-MHz wide channels in the federal government band could be simultaneously in use. Thus, EIBASS' point about the imprudent, even irresponsible, use of radio frequency signals for a medical application, but on an unprotected, secondary basis, is now admitted to by AMF, even though AMF seems not to understand that reality.

² *Ibid.*, at page 2, middle paragraph.

³ September 5, 2007, AMF Petition for Rulemaking, at page 15.

⁴ August 15, 2011, AMF *ex parte* filing, at page 2, at the end of the first full paragraph.

⁵ June 8, 2011, AMF *ex parte* filing, at page 2, last paragraph; August 15, 2011, AMF *ex parte* filing, at page 3, second paragraph.

**ET Docket 09-36: MMNS Devices at 413–457 MHz
EIBASS Rebuttal to AMF August 15, 2011, *Ex Parte* Filing**

II. Summary

5. Based upon AMF's instant *ex parte* comments, the record is now even more clear that proposed use of 451–457 MHz for control of implanted muscle stimulator devices is a reckless idea, and such proposed allocation could put medical patients at risk. Patients deserve better. Use of radio frequency signals for the control of implantable muscle stimulator devices is a worthwhile goal, but deserves its own primary, and protected, allotment; accordingly, that rules out 451–457 MHz, because of the existence of incumbent 455–456 MHz RPU stations.

Respectfully submitted,

/s/ Dane E. Ericksen, P.E., CSRTE, 8-VSB, CBNT
EIBASS Co-Chair
Hammett & Edison, Inc., Consulting Engineers
San Francisco, CA

/s/ Richard A. Rudman, CPBE
EIBASS Co-Chair
Remote Possibilities
Santa Paula, CA

August 19, 2011

EIBASS
18755 Park Tree Lane
Sonoma, CA 95476
707/996-5200 dericksen@h-e.com